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JUL 16 1964

WATER SUPPLY OUTLOOK CURRENT SERIAL RECORDS
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
IDAHO

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
and
IDAHO STATE RECLAMATION ENGINEER

Data included in this report were obtained by the agency named above in cooperation with the Comptroller of Water Rights of British Columbia, and Federal, State and private organizations listed on the last page of this report.

||||||| AS OF |||||
JAN. 1, 1964

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 2807, Portland, Oregon 97208.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES _____	MONTHLY (FEB.-MAY) _____	PORTLAND, OREGON _____	ALL COOPERATORS
BASIC DATA SUMMARY _____	OCTOBER 1 _____	PORTLAND, OREGON _____	ALL COOPERATORS
STATES			
ALASKA _____	MONTHLY (MAR.-MAY) _____	PALMER, ALASKA _____	ALASKA S.C.D.
ARIZONA _____	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA _____	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO _____	MONTHLY (FEB.-MAY) _____	FORT COLLINS, COLORADO _____	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO _____	MONTHLY (JAN.-JUNE) _____	BOISE, IDAHO _____	IDAHO STATE RECLAMATION ENGINEER
MONTANA _____	MONTHLY (JAN.-JUNE) _____	BOZEMAN, MONTANA _____	MONT. AGR. EXP. STATION
NEVADA _____	MONTHLY (JAN.-MAY) _____	RENO, NEVADA _____	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON _____	MONTHLY (JAN.-JUNE) _____	PORTLAND, OREGON _____	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH _____	MONTHLY (JAN.-JUNE) _____	SALT LAKE CITY, UTAH _____	UTAH STATE ENGINEER
WASHINGTON _____	MONTHLY (FEB.-JUNE) _____	SPOKANE, WASHINGTON _____	WN. STATE DEPT. OF CONSERVATION
WYOMING _____	MONTHLY (FEB.-JUNE) _____	CASPER, WYOMING _____	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA _____	MONTHLY (FEB.-JUNE) _____	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA _____	MONTHLY (FEB.-MAY) _____	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
IDAHO

Report prepared by

MORLAN W. NELSON Snow Survey Supervisor

and

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SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
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Issued by

LEE T. MORGAN
STATE CONSERVATIONIST
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WATER SUPPLY OUTLOOK for IDAHO



GENERAL SUMMARY - JANUARY 1, 1964

Snowfall so far this winter season is far above 1963, but still significantly below average. Fall rain primed the watershed soils to a greater extent than usual. Soil moisture sites, at key snow courses throughout the state, in general indicate excellent soil moisture conditions. Also, the soils beneath the snow pack are not frozen as was the case at this time last year. This is a desirable characteristic because the soil can take up some melting snow-water in case of warm winter rains as have occurred in the past few years.

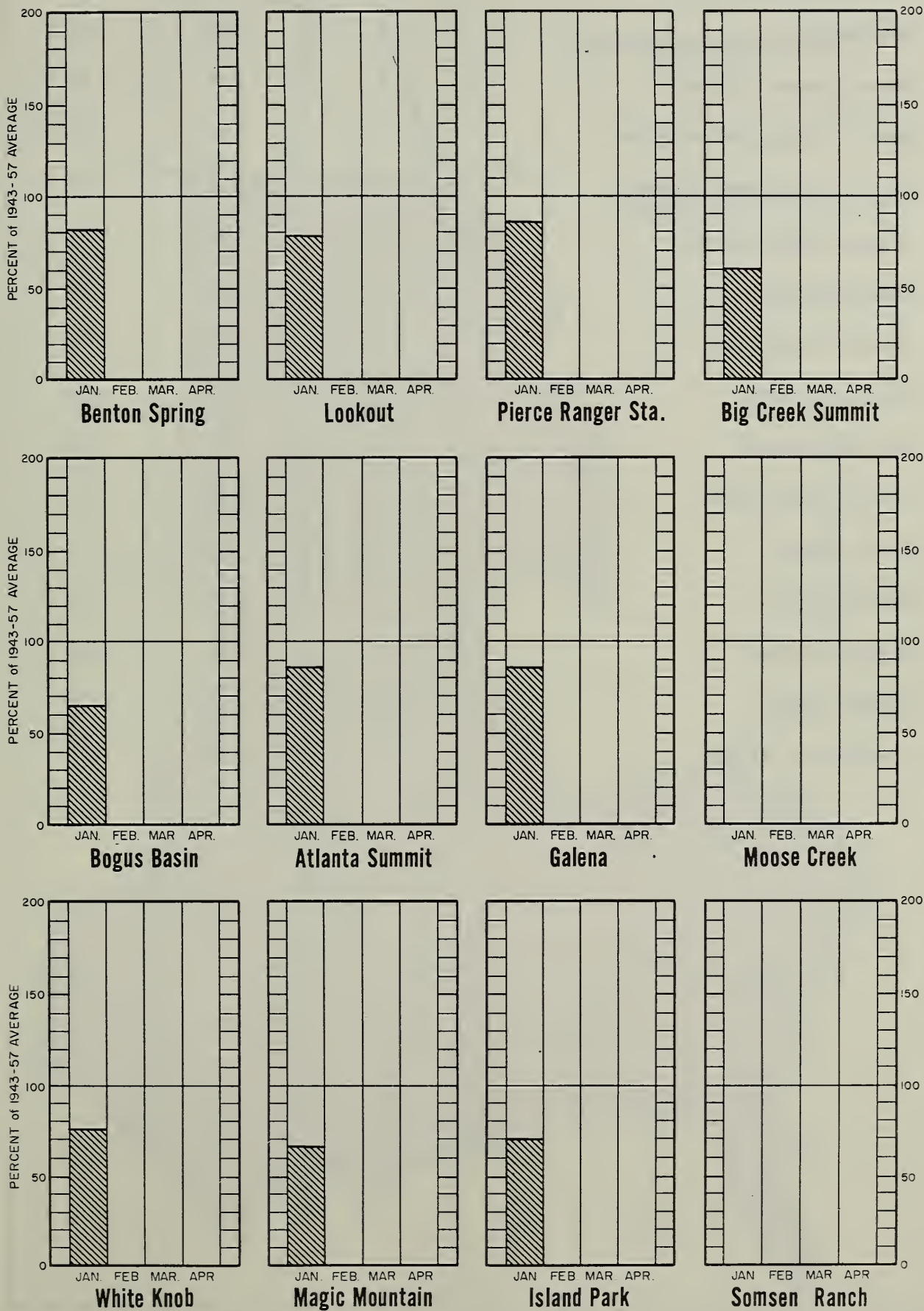
Snowfall, as measured at a very few courses on December 1, indicated near normal snow cover. However, during the month of December, there were many days when the valleys were covered by thick clouds and fog while the tops of the mountains were in bright sunshine and received no snowfall. As a result, the snow-water contents expressed as a percent of average are well below normal. On the Owyhee River, there is five times more than last year's snow cover. Reservoir storage in general is good because of the heavy rains during the summer and fall of 1963.

The water supply outlook in general appears close to normal since there is good reservoir stored water and good soil moisture conditions.

SNOW WATER DEPTHS ACCUMULATION

For Selected Snow Courses
As Compared To 1943-57 15Yr. Average

January 1, 1964



COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	AVERAGE <i>b</i>
Priest River	2	168	81
Spokane	1	142	78
Camas-Beaver Creek	2	121	59
Henry's Fork-Teton River	5	153	64
Raft River-Goose Creek	3	317	72
Salmon Falls Creek	6	189	67
Bruneau River	4	165	64
Little Lost River	5	258	74
Big Lost River	1	130	76
Big Wood River	5	139	78
Little Wood River	2	84	57
Boise River	5	195	74
Owyhee River	2	617	63
Payette River	5	210	60
Salmon River	2	162	76
Clearwater River	3	174	77

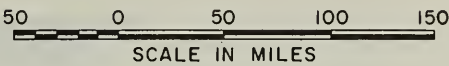
RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1943 - 57 AVERAGE
<u>Clark Fork-Pend Oreille</u>				
Hungry Horse	3428.0	2995.0	3155.0	2883.0
Flathead	1791.0	1532.0	1610.0	1257.1
Pend Oreille	1561.0	631.1	1152.9	534.4
Noxon	334.6	326.7	331.3	--
<u>Spokane</u>				
Coeur d'Alene	238.5	117.2	185.2	162.7
<u>Snake</u>				
Jackson Lake	847.0	607.9	531.9	435.7
American Falls	1700.0	883.7	923.2	1230.8
Palisades	1200.0	825.4	869.3	--
Island Park	127.0	64.9	95.9	89.4
Grassy Lake	15.2	7.7	11.5	12.5
Brownlee	980.2	724.0	960.0	--
<u>Big Lost</u>				
Mackay	44.2	34.4	24.0	29.3
<u>Big Wood</u>				
Magic	191.5	102.0	89.3	116.1
<u>Little Wood</u>				
Little Wood	33.3	15.6	9.5	--
<u>Boise</u>				
Anderson Ranch	423.2	306.1	301.2	237.0
Arrowrock	286.6	238.4	217.9	139.0
Lucky Peak	278.2	25.7	43.8	--
Lake Lowell (Deer Flat)	169.0	116.3	120.1	86.1
<u>Owyhee</u>				
Owyhee	715.0	266.6	202.1	377.8
<u>Payette</u>				
Cascade	653.2	345.4	532.7	211.8
Deadwood	161.9	80.0	78.3	81.3
<u>Goose-Trapper Creeks</u>				
Oakley	74.4	9.3	13.0	13.0
<u>Salmon Falls Creek</u>				
Salmon Falls	182.6	27.4	31.9	21.9
<u>Bear</u>				
Bear Lake	1421.0	700.0	717.3	806.4

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

JANUARY 1, 1964



Contents
RESERVOIR
Capacity

631.1
PEND OREILLE
1561.0

117.2
COEUR D'ALENE
238.5

80.0
DEADWOOD
161.9

345.4
CASCADE
653.2

724.0
BROWNLEE
980.2

266.6
OWYHEE
715.0

116.3
LAKE LOWELL
169.0

25.7
LUCKY PEAK
278.2

238.4
ARROWROCK
286.6

306.1
ANDERSON RANCH
423.2

326.7
NOXON
334.6

2995.0
HUNGRY HORSE
3428.0

1532.0
FLATHEAD LAKE
1791.0

34.4
MACKAY
44.2

64.9
ISLAND PARK
127.0

7.7
GRASSY LAKE
15.2

607.9
JACKSON LAKE
847.0

825.4
PALISADES
1200.0

883.7
AMERICAN FALLS
1700.0

700.0
BEAR LAKE
1421.0

15.6
LITTLE WOOD
33.3

27.4
SALMON FALLS
182.6

9.3
OAKLEY
74.4

102.0
MAGIC
191.5



VALLEY PRECIPITATION 1/

Division Averages and Departures In Inches

DRAINAGE DIVISIONS	Fall		Winter	
	Sep. - Oct. - Nov. 1963		December 1963	
	Average <u>2/</u>	Departure <u>3/</u>	Average <u>2/</u>	Departure <u>3/</u>
Kootenai	7.28	+1.19	2.11	-0.95
Flathead	4.34	-0.87	1.81	-0.30
Clark Fork	3.40	+0.50	0.93	-0.07
Pend Oreille-Spokane	8.05	-0.78	2.69	-1.43
Upper Snake	6.51	+1.68	1.56	-0.92
Snake River Plain	3.00	+0.90	0.81	-0.20
Salmon-Payette-Boise	5.39	+0.68	1.44	-1.32
Clearwater	5.46	-1.24	2.59	-0.48
Southeastern Oregon	3.32	+0.95	0.85	-0.47

1/ Preliminary analysis by U. S. Weather Bureau from data furnished by Meterological Service of Canada and U. S. Weather Bureau.

2/ 15-year (1943-1957) division average.

3/ Departure from 15-year (1943-57) drainage division average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^b

UPPER COLUMBIA DRAINAGEPEND OREILLE - PRIEST RIVER

Benton Meadow	16A2	2344	12/27	15	2.5	0.0	3.1
Benton Spring	16A3	4900	12/30	30	7.4	5.9	9.1
Schweitzer Ridge	16A5	6100	12/30	73	23.6	--	--
Schweitzer Bowl	16A6	4500	12/30	50	16.2	--	--

SPOKANE RIVER

Fourth of July Summit	16B3	3100	12/30	15	4.0	T	--
Granite Peak (A)	15B13	6000	12/26	49	13.7	--	--
Lookout	15B2	5250	12/30	49	12.8	9.0	16.4*
Medicine Ridge (A)	15B4	6150	12/26	59	16.5	--	--
Outlaw Creek (A)	15B12	3750	12/26	17	3.9	--	--

SNAKE RIVER BASINMEDICINE LODGE - MUD LAKE DRAINAGES

Camp Creek	12E3	6800	12/30	15	2.8	2.2	4.2*
Kilgore	11E12	6200	12/27	16	2.4	2.1	4.6*

HENRY'S FORK - TETON RIVER

Big Springs	11E9	6500	12/29	26	5.8	3.2	8.2
Darby Canyon (A)	10F21	8250	12/30	29	7.9	--	--
Island Park	11E10	6315	12/29	23	4.5	2.8	6.4
Pine Creek Pass	11F2	6750	12/30	24	4.9	1.9	--
State Line	11F1	6400	12/30	21	4.0	1.9	6.6*
Teton Pass	10F13	8500	12/30	33	9.0	5.8	16.3*
Valley View	11E8	6500	12/29	22	4.6	4.5	5.8

BLACKFOOT - PORTNEUF RIVERS

China Hat	11G2	6300	12/30	14	2.5	--	--
Dempsey Creek	12G5	6280	12/31	19	3.0	--	--
Pebble Creek	12G2	6550	12/31	14	3.6	--	--
Somsen Ranch	11G1	7000	12/30	19	3.4	--	--

RAFT RIVER, GOOSE CREEK, SALMON FALLS CREEK, BRUNEAU RIVER

Badger Gulch	14G3	6660	12/27	12	2.6	0.0	41.*
Bear Creek (A)	15H1	7800	12/30	21	4.5	2.9	7.1*
Bostetter Rgr. Sta. (A)	14G1	7500	12/30	21	4.4	1.8	7.6*
Boy Scout Camp (A)	13G2	7600	12/30	21	4.5	3.8	--

(b) 1943-57, 15 year period. # Not located directly on this drainage. * Estimated 1943-57, 15 year Average.
 (A) Aerial observation: Water content estimated.

2
SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^b
Cedar Creek (A)	14G5	7000	12/30	15	3.1	1.7	--
Clear Creek Mdws. (A)	13H2	9050	12/30	36	7.7	4.1	--
Deadline	14G4	6900	12/27	30	6.2	2.5	8.2*
Goat Creek (A)	15H13	8800	12/30	20	4.2	2.4	6.6*
Howell Canyon	13G1	8000	12/28	30	7.9	2.9	9.0*
Hummingbird Spgs. (A)	15H15	8945	12/30	21	4.5	2.9	7.8*
Magic Mountain	14G2	6700	12/27	25	5.2	2.1	7.8*
Pole Creek R. S.	15H14	8330	12/31	23	4.9	2.8	6.7*
Red Point (A)	15H18	7940	12/30	15	3.2	1.0	--
Summit Springs (A)	13G4	8500	12/30	11	2.4	T	--
Vi Pont (A)	13H3	7650	12/30	21	4.5	1.8	--
Wilson Creek (A)	15G2	7500	12/30	21	4.5	1.5	--

LITTLE LOST RIVER

Fairview Guard Sta.	13E5	5850	12/27	14	2.0	T	2.6*
Lost-Garfield	13E3	5700	12/27	11	2.0	0.0	2.0*
Moonshine	13E6	7250	12/27	20	4.2	2.0	6.1*
Sawmill Canyon	13E4	6000	12/27	17	3.3	1.5	4.2*
Wet Creek Summit	13E7	8175	12/26	16	3.2	2.2	4.9*

BIG LOST RIVER

White Knob	13F1	7700	12/30	13	2.6	2.0	3.4*
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BIG WOOD RIVER

Dollarhide Summit (A)	14F8	8620	12/28	35	9.0	6.9	13.0*
Galena	14F1	7500	12/31	26	6.6	5.0	7.6*
Galena Summit	14F12	8795	12/31	31	8.4	6.1	9.5*
Graham Ranch	14F5	6200	12/30	20	4.4	3.3	6.5
Mount Baldy	14F9	9000	12/28	30	7.7	4.7	9.6*
Soldier Rgr. Sta.	14F11	6100	1/4	14	2.2	3.4	--

Little Wood River - Fish Creek

Garfield R. S.	13F4	6554	12/26	13	2.4	2.5	4.4*
Muldoon	13F5	6300	12/26	11	1.9	2.6	3.1*
Porcupine (A)	14F14	8350	1/3	27	6.9	9.1	--
Swede Peak (A)	13F9	7500	1/3	25	6.4	5.2	--

BOISE RIVER

Atlanta Summit (A)	15F4	7500	12/28	45	11.5	6.7	13.4*
Bad Bear	15F2	5500	12/30	18	3.2	T	--
Bogus Basin Road	16F4	5360	12/31	12	2.7	0.0	1.7*
Couch Summit (A)	14F10	6950	12/28	26	6.7	4.9	--

(b) 1943-57, 15 year period. # Not located directly on this drainage. * Estimated 1943-57, 15 year Average.
 (A) Aerial observation; Water content estimated.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^b

Moore's Creek Summit	15F1	6100	12/30	36	9.2	3.2	14.2*
Prairie	15F6	5600	12/30	16	4.5	--	--
Trinity Mountain (A)	15F5	7400	12/28	45	11.5	9.3	16.6*

OWYHEE RIVER

Silver City	16F3	6400	12/30	19	3.9	0.8	6.6*
South Mountain	16G1	6340	12/29	16	3.2	0.4	5.2*

PAYETTE RIVER

Big Creek Summit	15E2	6608	12/31	42	11.6	12.4	--
Bogus Basin	16F2	6120	12/31	28	7.0	2.3	10.7*
Cozy Cove	15E8	5900	12/27	20	4.1	2.2	7.0*
Crawford R. S.	15E3	4800	12/31	13	2.4	0.0	--
Deadwood Airstrip	15E10	5440	12/26	18	3.7	2.1	7.1*
Deadwood Dam	15E7	5500	12/27	22	4.7	2.9	7.9*
Deadwood Summit (A)	15E4	7000	12/31	59	16.3	19.4	--
Greenfield Flat (A)	16E7	7370	12/31	35	9.7	12.4	--
Rock Flat Summit	16E1	5200	12/27	24	4.9	2.1	8.0*
Squaw Meadow (A)	15D2	5800	12/31	45	12.4	12.7	--

WEISER RIVER

Boulder Creek	16D1	5500	12/26	26	7.0	5.1	--
Mica Ridge (A)	16E6	6800	12/31	37	10.2	12.4	--
Squaw Flat (A)	16E5	6230	12/31	35	9.7	12.4	--

SALMON RIVER

Big Creek Summit	15E2	6608	12/31	42	11.6	12.4	--
Borah (A)	13E8	8250	12/30	13	2.6	--	--
Chapman Creek	16D2	4215	12/30	10	1.7	0.0	1.4*
Johns Creek	16D3	3805	12/30	4	0.9	0.0	1.0*
Mill Creek Summit (A)	14E1	8870	12/30	41	10.5	6.1	--
Morgan Creek Summit	14E4	7580	12/26	20	4.3	--	--
Redfish Lake	14E2	6600	12/30	13	2.5	--	--
Twin Peaks (A)	14E3	10300	12/30	39	10.0	--	--
Whitebird Summit	16D5	4390	12/30	14	2.7	T	2.2*

Lemhi River

Above Gilmore (A)	13E19	8200	12/30	13	2.6	--	--
Aspen-Hall Pass (A)	13E21	8110	12/30	19	3.8	--	--
Copes Camp	13E17	7500	12/30	13	2.8	2.4	--
Gertson Creek (A)	13D17	8050	12/27	15	3.2	--	--

(b) 1943-57, 15 year period. # Not located directly on this drainage. * Estimated 1943-57, 15 year Average.
 (A) Aerial observation: Water content estimated.

APPENDIX

4

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^b

Hall Creek	13E20	7560	12/30	6	1.3	--	--
Meadow Lake	13E18	9100	12/30	39	10.0	9.5	--
Schwartz Lake	13E16	8500	12/30	24	5.1	3.6	--

CLEARWATER RIVER

Above Greer	16C11	1240	12/27	T	T	0.0	--
Cayuse Airstrip	15C3	3700	12/26	13	2.8	T	3.3*
Crater Meadows	15C9	6100	12/26	52	14.5	--	--
Elk Butte (A)	16C15	5550	12/26	53	15.6	--	--
Fish Lake Airstrip	15C2	5000	12/26	48	12.8	11.5	17.4*
Forty-Nine Mdws. (A)	15B3	5000	12/26	42	11.3	--	--
Goat Lake (A)	14C9	6600	12/26	51	14.2	--	--
Greer Summit	16C13	3000	12/27	T	T	0.0	--
Hemlock Butte	15C6	5500	12/26	68	20.0	--	--
Lost Lake (A)	15B14	6000	12/26	61	17.0	--	--
Midway	16C12	2200	12/27	T	T	0.0	--
Pierce Rgr. Sta.	15C5	3171	12/27	19	4.4	T	5.2*
Shanghai Summit	15C4	4600	12/26	35	9.4	--	--

PALOUSE RIVER

Crumarine Creek	16C6	3500	12/30	13	3.0	T	2.3*
East Twin	16C3	4000	12/30	17	4.7	T	5.1*
Howard Creek	16C5	3500	12/30	12	2.3	T	2.1*
Moscow Mountain	16C2	4800	12/30	24	6.1	1.0	7.1*
West Twin	16C4	4200	12/30	14	3.0	T	4.0*

GREAT BASIN DRAINAGEBEAR RIVER

Emigrant Summit	11G6	7350	12/30	26	6.6	--	--
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Montpelier Creek

Giveout	11G16	6840	12/30	19	4.4	1.4	--
Little Beaver	11G20	6970	12/30	24	5.2	1.8	--
Montpelier Creek	11G18	6570	12/30	13	2.5	1.0	--
Whiskey Flat	11G21	6985	12/30	15	4.0	0.7	--

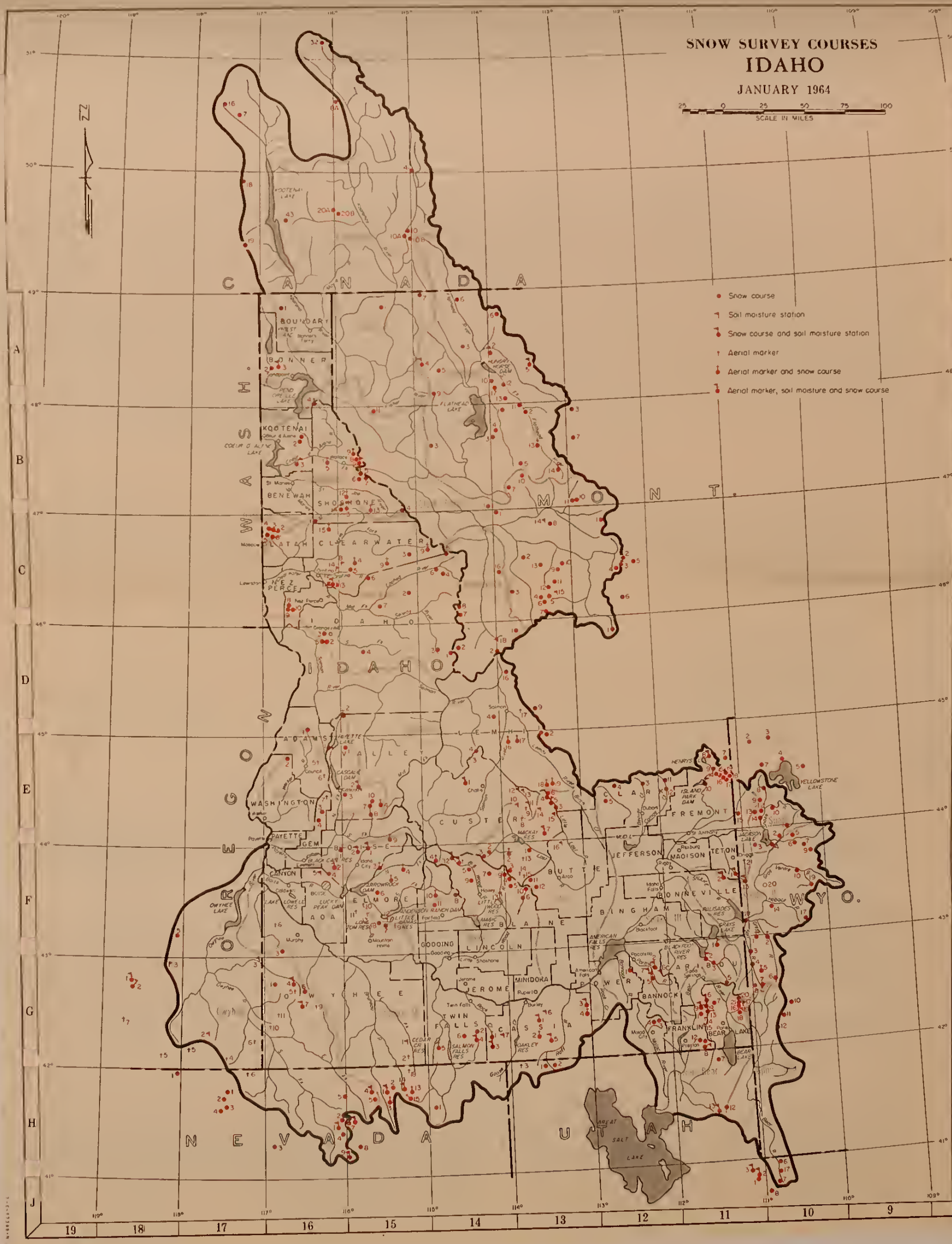
(b) 1943-57, 15 year period. # Not located directly on this drainage. * Estimated 1943-57, 15 year Average.
 (A) Aerial observation; Water content estimated.

SNOW SURVEY COURSES IDAHO

JANUARY 1964

0 25 50 75 100
SCALE IN MILES

- Snow course
- 1 Soil moisture station
- 1 Snow course and soil moisture station
- † Aerial marker
- † Aerial marker and snow course
- 1 Aerial marker, soil moisture and snow course



Index to IDAHO SNOW COURSES

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.	NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.	NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.	NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.	
			44T.	44N	44E	44S				44T.	44N	44E	44S				44T.	44N	44E	44S				44T.	44N	44E	44S	
KOOTENAI RIVER																												
15811	M	Barce Creek	36	26N	35W	5500	10624	WY	Blind Bull	6	34N	115W	8750	13824	I	Sawmill Canyon	17	12N	26E	6400	16824	I	Mica Ridge	15	15N	22E	6800	
15812	M	Brush Creek	13	30N	26W	5000	10625	WY	Bryant Flat	9	38N	115W	6250	13825	I	Wet Creek Summit	15	8N	25E	8175	16825	I	Squaw Flat	32	17N	22E	6200	
16	BC	Ferguson	50°40'	114°0'	110°30'	2900	10626	WY	Canyon	42°44'	110°30'	7750	13826	I							16826	I	Flower Creek	15	16	17N	24	6000
10	BC	Fernie	49°31'	114°0'	110°30'	3500	10627	WY	COE Camp	9	29N	118W	7400	BIG LOST RIVER														
7	BC	Gerrard	50°33'	114°0'	110°30'	510	10628	WY	C. Woodcock Lake	4	31N	118W	7500	13827	I	Bear Canyon	24	5N	12E	4650	13828	I	Above Almore	13	13N	26E	8200	
43	BC	Gray Creek	49°58'	114°0'	110°30'	500	10629	WY	C. Alter Creek	2	34N	116W	6534	13829	I	Cherry Creek Pass	24	5N	23E	4600	13830	I	Big Flat	25	11N	23E	7550	
208	BC	Hambley	49°41'	114°0'	110°30'	500	10630	WY	Deadman Ranch	32	37N	117W	7750	13831	I	Copper Basin	24	5N	21E	4700	13832	I	Borah	21	10N	23E	8250	
12	BC	Marble Canyon	50°12'	114°0'	110°30'	500	10631	WY	East Rim Divide	32	37N	117W	7750	13833	I	Iron Bog	24	5N	22E	7650	13834	I	Chapman Creek	16	29N	22E	4235	
108	BC	Morrissey Ridge	49°52'	114°0'	110°30'	610	10632	WY	Four Mile Meadows	35	45N	112W	7770	13835	I	Leadbelt	34	4N	24E	4975	13836	I	Chapman Creek	36	18N	22E	7500	
19	BC	Nelson	49°50'	114°0'	110°30'	610	10633	WY	Four Mile Meadows	35	45N	112W	7750	13837	I	Lost Head Divide	19	4N	18E	875	13838	I	Chapman Creek	22	22N	23E	8100	
10A	BC	New Fernie	49°50'	114°0'	110°30'	610	10634	WY	Jenny Boundary	33	37N	118W	7750	13839	I	North Fork Meadow	20	7N	18E	9150	13840	I	Chapman Creek	22	22N	23E	8100	
15A1	M	Red Mountain	49°50'	114°0'	110°30'	610	10635	WY	Jenny Boundary	33	37N	118W	7750	13841	I	Slack Creek	17	4N	20E	925	13842	I	Chapman Creek	22	22N	23E	8100	
18	BC	Sandwich	49°50'	114°0'	110°30'	610	10636	WY	Jenny Boundary	33	37N	118W	7750	13843	I	Slack Creek	17	4N	20E	925	13844	I	Chapman Creek	22	22N	23E	8100	
5A	BC	Shelby Pass	49°50'	114°0'	110°30'	610	10637	WY	Jenny Boundary	33	37N	118W	7750	13845	I	Slack Creek	17	4N	20E	925	13846	I	Chapman Creek	22	22N	23E	8100	
16A1	I	Smith Creek	29	60N	7E	4900	10638	WY	Jenny Boundary	33	37N	118W	7750	13847	I	Slack Creek	17	4N	20E	925	13848	I	Chapman Creek	22	22N	23E	8100	
20A1	I	Sullivan Mine	29	60N	7E	4900	10639	WY	Jenny Boundary	33	37N	118W	7750	13849	I	Slack Creek	17	4N	20E	925	13850	I	Chapman Creek	22	22N	23E	8100	
41	BC	Upper Elk River	49°50'	114°0'	110°30'	610	10640	WY	Jenny Boundary	33	37N	118W	7750	13851	I	Slack Creek	17	4N	20E	925	13852	I	Chapman Creek	22	22N	23E	8100	
14A7	M	Weasel Divide	6	27N	24E	5450	10641	WY	Jenny Boundary	33	37N	118W	7750	13853	I	Slack Creek	17	4N	20E	925	13854	I	Chapman Creek	22	22N	23E	8100	
PRIEST RIVER																												
16A2	I	Penton Meadow	27	58N	4E	4700	10642	WY	Jenny Boundary	33	37N	118W	7750	13855	I	Slack Creek	17	4N	20E	925	13856	I	Chapman Creek	22	22N	23E	8100	
16A3	I	Penton Spring	27	58N	4E	4700	10643	WY	Jenny Boundary	33	37N	118W	7750	13857	I	Slack Creek	17	4N	20E	925	13858	I	Chapman Creek	22	22N	23E	8100	
PEND OREILLE - CLARK FORK RIVER																												
13013	M	Black Pine	23	8N	16E	7100	10644	WY	Jenny Boundary	33	37N	118W	7750	13859	I	Slack Creek	17	4N	20E	925	13860	I	Chapman Creek	22	22N	23E	8100	
1205	M	Chessman Reservoir	2	25N	6E	6200	10645	WY	Jenny Boundary	33	37N	118W	7750	13861	I	Slack Creek	17	4N	20E	925	13862	I	Chapman Creek	22	22N	23E	8100	
12810	M	Copper Creek	1	15N	30E	6100	10646	WY	Jenny Boundary	33	37N	118W	7750	13863	I	Slack Creek	17	4N	20E	925	13864	I	Chapman Creek	22	22N	23E	8100	
12811	M	Cotton Mite	1	15N	30E	6100	10647	WY	Jenny Boundary	33	37N	118W	7750	13865	I	Slack Creek	17	4N	20E	925	13866	I	Chapman Creek	22	22N	23E	8100	
13810	M	Coyote Hill	1	15N	30E	6100	10648	WY	Jenny Boundary	33	37N	118W	7750	13867	I	Slack Creek	17	4N	20E	925	13868	I	Chapman Creek	22	22N	23E	8100	
1309	M	El Dorado Mine	23	8N	16E	7100	10649	WY	Jenny Boundary	33	37N	118W	7750	13869	I	Slack Creek	17	4N	20E	925	13870	I	Chapman Creek	22	22N	23E	8100	
13011	M	Fred Burn Pass	12	6N	12E	8000	10650	WY	Jenny Boundary	33	37N	118W	7750	13871	I	Slack Creek	17	4N	20E	925	13872	I	Chapman Creek	22	22N	23E	8100	
13015	M	Georgetown Lake	4	5N	17E	6450	10651	WY	Jenny Boundary	33	37N	118W	7750	13873	I	Slack Creek	17	4N	20E	925	13874	I	Chapman Creek	22	22N	23E	8100	
13010	M	Gold Creek Lake	14	8N	12W	7200	10652	WY	Jenny Boundary	33	37N	118W	7750	13875	I	Slack Creek	17	4N	20E	925	13876	I	Chapman Creek	22	22N	23E	8100	
1501	M	Hoodoo Creek	9	12N	27E	6250	10653	WY	Jenny Boundary	33	37N	118W	7750	13877	I	Slack Creek	17	4N	20E	925	13878	I	Chapman Creek	22	22N	23E	8100	
1301	M	Intergaard	6	5N	13E	6450	10654	WY	Jenny Boundary	33	37N	118W	7750	13879	I	Slack Creek	17	4N	20E	925	13880	I	Chapman Creek	22	22N	23E	8100	
1302	M	Luttrell Forest	17	13N	14E	4400	10655	WY	Jenny Boundary	33	37N	118W	7750	13881	I	Slack Creek	17	4N	20E	925	13882	I	Chapman Creek	22	22N	23E	8100	
13012	M	Luttrell Forest	17	13N	14E	4400	10656	WY	Jenny Boundary	33	37N	118W	7750	13883	I	Slack Creek	17	4N	20E	925	13884	I	Chapman Creek	22	22N	23E	8100	
13013	M	Luttrell Forest	17	13N	14E	4400	10657	WY	Jenny Boundary	33	37N	118W	7750	13885	I	Slack Creek	17	4N	20E	925	13886	I	Chapman Creek	22	22N	23E	8100	
13014	M	Luttrell Forest	17	13N	14E	4400	10658	WY	Jenny Boundary	33	37N	118W	7750	13887	I	Slack Creek	17	4N	20E	925	13888	I	Chapman Creek	22	22N	23E	8100	
13015	M	Luttrell Forest	17	13N	14E	4400	10659	WY	Jenny Boundary	33	37N	118W	7750	13889	I	Slack Creek	17	4N	20E	925	13890	I	Chapman Creek	22	22N	23E	8100	

Agencies Assisting with Snow Surveys , etc.

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests, and
Water Resources, British Columbia
Department of Resources and Development,
Water Resources Division

States:

Idaho State Reclamation Engineer
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
Forest Service
Agricultural Research Service

U. S. Department of Commerce
Weather Bureau

U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Geological Survey
Indian Service
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Boise Project Board of Control
Little Wood River Irrigation District
Jordan Valley Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Twin Lakes Irrigation Company
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control

PRIVATE CORPORATIONS

Amalgamated Sugar Company

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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with the Snow Survey"*